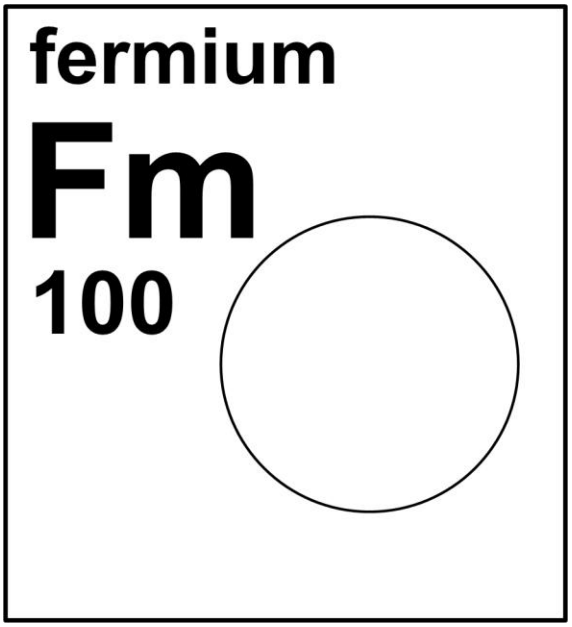
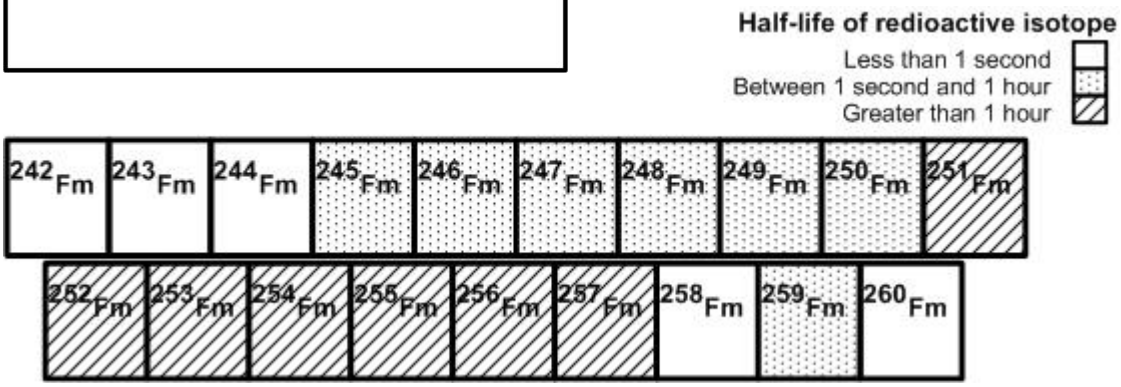
fermium



Stable isotope	Atomic mass	Mole fraction
(none)		



Important applications of stable and/or radioactive isotopes

Fermium (^{255}Fm) was discovered in 1952 among the products of the first hydrogen bomb test at Eniwetok Atoll in the Pacific Ocean. Subsequently, it was produced by bombarding ^{238}U with ^{16}O ions to obtain ^{250}Fm, plus a number of other processes. It is the heaviest element that can be formed by neutron bombardment of lighter elements, and therefore is the heaviest element that can be synthesized in macroscopic quantities. Fm does not occur naturally in the Earth's crust.

Applications: It is of interest in particle physics research, but has no commercial applications. ^{253}Fm was one of the decay products used to confirm synthesis of Element 112 in a particle accelerator experiment.

Figure 1: The first successful hydrogen bomb test (Ivy-Mike) in 1952 produced ^{255}Fm, which was the first Fm isotope ever detected.